

REMARKS

Claims 1-42 are pending in this application. Claims 1, 16, 29 and 42 are the independent claims. Claims 16-28 are allowed. No claims are amended in response to the outstanding Office Action.

Allowed/Allowable Subject Matter

The allowance of claims 16-28 is acknowledged and appreciated. Claims 3-6, 9-12, 14, 31-33 and 41 are indicated as being allowable if rewritten in independent form. Claims 3-6, 9-12, 14, 31-33 and 41, as well as the rejected claims, are in condition for the reasons discussed below.

Rejections Under 35 USC §103

Claims 1, 2, 7, 8, 13, 15, 29, 30, 36-39 and 42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 6,393,977 to Voisin in view of US Patent Application Publication 2002/0192109 to Ting et al. (Ting). The rejection is respectfully traversed.

Voisin relates to a high pressure processor for elimination of bacteria in raw food products. The processor 10 includes a pressure vessel 30 having vertical side walls and a top and bottom lid 38, 36. A cylindrical liner 40 is mounted inside the vessel 30 and defines a pressure chamber 42 inside the vessel. The bottom 36 is provided with an inlet/outlet opening to allow a pressure medium fluid move in and out of the pressure chamber 42. In operation, raw shell fish are placed in a flexible bag filled with water and inserted into the pressure chamber. The pressure chamber is then filled with a pressure medium, such as water and the lids are closed. An external pressure source is used to supply pressure to the pressure vessel to increase pressure thereby killing any bacteria within the shell fish.

It is admitted in the Office Action that Voisin does not disclose the use of a container made of a material having low adiabatic heat emission relative to adjoining substances. In an effort to overcome the admitted deficiency, it is alleged that one of ordinary skill in the art would have modified Voisin according to the teachings of Ting by modifying the container of Voisin (i.e. the flexible bag in which the shell fish are placed) with the carrier 10 of Ting made of stainless steel or PVC.

Applicant submits that were the flexible bag of Voisin modified to include a stainless steel carrier as taught by Ting, the container (i.e. the flexible bag/carrier)

would not comprise a body which is made of a material having low adiabatic heat emission relative to adjoining substances, so that the body from adjoining substances absorbs heat which is generated by adiabatic rise during the high pressure treatment. Rather, as clearly disclosed in Ting, the carrier 10 includes insulation 18 between the inner and outer surfaces of the carrier so that the carrier is insulated to prevent heat loss from the product to the metal vessel. By using an insulation material which increases in temperature during compressions similar to the temperature rise in the product and pressure medium, a temperature barrier is generated to further prevent heat transfer from the product chamber 13 to the wall of the pressure vessel 26 (paragraph [0018]). If it is desirable to pressure process the substance at low temperatures, the carrier may be insulated with a material having a minimum adiabatic heating characteristics, thereby preventing the product from absorbing heat from the vessel walls (paragraph [0031]).

Thus, contrary to the subject matter recited in the rejected claims, the effect of using such a material is to prevent heat transfer from the product to the vessel walls. In contrast, according to the subject matter of the rejected claims, the effect of the adiabatic material is that as the temperature of the product rises when the temperature is increased, the heat is transferred to the adiabatic material of the wall and the temperature of the product is maintained cool (i.e. the temperature increase is dissipated away from the product such that the product does not thaw). Accordingly, a person skilled in the art would not combine the teachings of Ting to modify the flexible bag of Voisin and even were such a combination made, the combination of references fails to disclose each and every feature recited in the rejected claims.

Moreover, by making such a combination, or modifying Voisin as proposed, the basic operating principle under which Voisin was designed to operate is changed and therefore Voisin would no longer function for its designed purpose. Additionally, were Voisin modified as proposed by Ting, the carrier 10 could not act as the pressure transfer device. Applicant notes that it is the “permeability of the bag” in Voisin that is alleged to provide the pressure transfer means for transfer of pressure from a first pressure medium to a second pressure medium. However, were the flexible bag replaced or modified according to the teachings of Ting, the “bag” would include inflexible stainless steel walls, floor and top that are insulated and therefore there would be no “pressure transfer device” to transfer pressure from a first pressure medium to a second pressure medium.

As the combination of references fails to disclose or suggest each and every feature recited in the rejected claims, withdrawal of the rejection is respectfully requested.

Claims 13 and 40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Voisin in view of Ting and further in view of US Patent 4,543,987 to Ekeleme. The rejection is respectfully traversed.

Claims 13 and 40 are allowable for their dependency on their respective base claims, as well as for the additional features cited therein. Further, as Ekeleme fails to overcome the deficiencies of Voisin and Ting, the combination of references fails to render the rejected claims obvious. Accordingly, withdrawal of the rejection is respectfully traversed.

CONCLUSION

In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

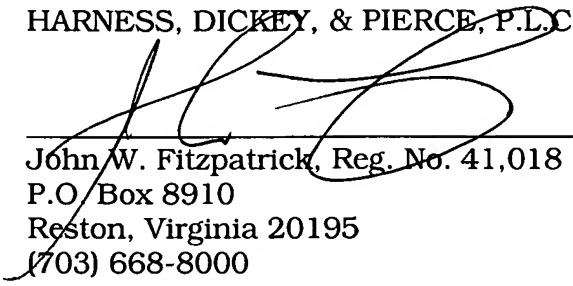
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John W. Fitzpatrick, Reg. No. 41,018, at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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